

I have repeatedly examined with the microscope the material deposited in the air-cells of the lungs in *pneumonia*, and compared its characters and appearance with that forming a tubercle, without being able to detect any more essential or constant difference between them, than exists between recently excreted and old pus. The same class of objects—incoherent colourless cells, molecules, and granular matter, appears to constitute the material in both cases—in hepatization or consolidation of the lung from inflammation, and in consolidation from tuberculous matter; and in both cases also, the material takes primarily the shape of the air-cells in which it is seated. In the material forming the consolidation resulting from inflammation, incoherent cellular forms predominate, as they do in recent pus; whereas in tuberculous matter, granular masses and molecules greatly predominate, as is also the case in old pus. And were we to imagine the fluid element of old pus, removed or absorbed, the remaining solid matter would be, in my opinion, tuberculous matter; the colourless elements of blood, pus, and tubercle passing by imperceptible gradations into each other.*

In *pneumonia*, the consolidating material is, as it were, suddenly thrown out over a wide extent of lung. All the blood-vessels are loaded with colourless elements. The blood itself, when withdrawn, assumes a buffy coat, and the texture, from the various blendings of the red colour of the blood, with the white colour of the new material separated from it, assumes various hues between dark red and whitish yellow.

In *phthisis*, on the other hand, the consolidating material is deposited at distant points, in a much slower manner; it becomes, as it were, old, before it becomes visible, and I have seen sections of the lung display an appearance precisely analogous, and indeed very similar to that of the face in small pox, and this in a patient who did not die of consumption.

My researches have been in like manner extended to the characters and appearances presented under the microscope by the material taken from pimples, boils, and all kinds of eruptions on the skin, and in all these instances, incoherent colourless cells, granular matter, and molecules, have been found in the greatest abundance. Moreover—and it is a fact of much importance—the same objects have been profusely detected, not only in the fixed textures surrounding the morbid matter, but likewise in blood taken from the vessels, administering to their nutrition. And it would appear, that when any texture becomes involved in a hurtful or destructive inflammation, or in a tuberculous or scrofulous disease, that its physiological type is altered, and its function impaired; the structural elements, whatever may be their normal qualities or characters, become more and more uniform, and at length corpuscular, the corpuscles being apparently identical with those circulating in the blood.

It has been said, that tubercles arise from “an error of nutrition,” which is perfectly true, but no practical advantage is derived from the use of a few words which are applicable alike to all diseases.—*Prov. Med. and Surg. Journ.*, April 7th, 1847.

28. *Abscesses of the Liver opening into the Bronchi*.—M. RAIKEN, in a memoir read before the Belgian Royal Academy of Medicine, has collected accounts of eight cases of abscesses of the liver opening into the bronchi, some of which occurred under his own observation. He regards these abscesses, as eventually curable by the powers of nature, when they can discharge themselves through a fistulous canal, commencing at the suppurating part, and passing on till it reaches and opens into one or more of the bronchial ramifications. On the other hand, it appears from eleven observations, based on pathological examination, that in cases where death has followed the opening of hepatic abscesses in the lungs, the suppurating cavity has not directly communicated with any one bronchus by an intermediate fistulous canal; but, on the contrary, its contents have made their way medietely to the bronchi—i. e., through the intervening tissues, depositing

* By the term *old pus*, the reader will understand that I mean *matter* which has been a long time excreted, and in which the corpuscles or cells having broken down, there remains a thick, more or less fluid material, composed of granular forms and molecules.

here and there in the lungs, the pleura, and other parts, some portion of themselves, in the form of masses, or of infiltration.

The reddish, thick, *fœtid*, purulent matter, compared to the washings of meat, often found in chronic abscesses of the liver, is very probably the result of decomposition of the pus, or of the pulaceous softening of the surrounding hepatic tissue; and although death does not inevitably follow, such matter shows great danger, on account of the suppurating cavity in the liver not being circumscribed throughout by an adventitious cellulo-vascular membrane, adapted for and favouring cicatrization.

Pus, actual bilious matter, liquefied and decomposed detritus of the hepatic tissue, biliary calculi, acephalocysts, or laminæ of vesicular bodies, coming from an abscess or cyst opening into hollow organs, lined with mucous membrane, as the bronchi—all these various products may, by the aid of an adventitious fistular canal, find their way into such organs, pass through them, and be rejected externally, without there following any functional disorders or material alterations incompatible with life or necessarily fatal.

The presence of bile in the pus of chronic abscesses of the liver must not always be looked upon as a certain proof that these abscesses are without an enclosing cellular wall, since it is not uncommon to meet with bile in encysted bodies, both in hydatid cysts, and in abscesses truly surrounded by an investing tunic.

The pus of chronic hepatic abscesses generally possesses an ammoniacal odour, but is sometimes inodorous.

In forming a diagnosis of chronic abscesses of the liver, the general history of the patient must be considered, and the absence of any disease about the lung or pleura noted. This being determined, we may have recourse to those signs more immediately pointing to disease and abscess of the organ. The slight suffering, which has hitherto attended the disease, when the abscess begins to point and seek an exit for its contents, increases in intensity; there is an acute, stabbing, burning, and heavy pain on the right side, corresponding to the seat of the abscess, and sometimes a fluctuation may be felt. Then, on the abscess bursting in the lungs, there is suddenly excessive dyspnœa, threatening suffocation, orthopnœa, inexpressible anxiety, loud and incessant tracheal and bronchitic rattlings, *fœtid* breath, an excrementitious taste in the mouth, sudden expectoration of puriform, acrid, and *fœtid* matter, brown, or reddish, or streaked with blood, sometimes mixed with bile, containing broken-down debris of hepatic substance, of biliary calculi, of hydatids, or of laminæ of acephalocysts. Whilst these phenomena present themselves, an unusual dullness is observed on one side of the thorax, generally the right, with the absence of the respiratory murmur, but without tubular breathing, or resonance of voice, or *ægophony*, or metallic tinkling, or any sound on succussion, or any enlargement of the side. If the ear be applied over the region of the liver, an evident gurgling is heard, extending to the base of the lung, whilst compression over this region immediately produces a copious expectoration; and lastly, the signs indicating a collection of fluid matter in the liver gradually decrease in number and intensity.

In cases where the symptoms of the discharge of matter from the lungs do not abate, the patient gradually succumbs, worn out by a sort of consumption. When, on the contrary, a gradual and progressive amelioration manifests itself—when, about the base of the lung, where the dullness existed, a mucous *râle* begins to be heard, followed up by the gradual appearance of the respiratory murmur, and the metallic tinkling or gurgling over the region of the abscess ceases to be appreciable—when compression over the hypochondrium is no longer painful, exciting no further dyspnœa, or expectoration of puriform matters—lastly, when all the disorders of the organism which attend hepatic abscess continue to decline day by day,—we need not despair of recovery. When a cure takes place in cases of hepatic abscesses, or hydatids, discharging themselves through the lungs, we must, in general, suppose the sac of the abscess to collapse, and adhesions to occur between its walls, so that only a cicatrix is left behind. But in order for such a happy result to occur, the walls of the sac ought to be but recent and thin, for when they become old, thick, and even cartilaginous in consistence, the power to collapse is lost. The question then arises, can a cure be effected when the sac is

thus dense and wanting in collapsibility? We can suppose it may, if its interior do not go on secreting pus, its walls becoming healthy, and if the sinus leading from it externally become obliterated. Then it would exist but as a serous cyst, like those sometimes met with in the brain, but not perceptibly interfering with the functions of the liver. And may not the cavity of the sac become gradually filled, in some cases, by solid areolar tissue, produced after the manner of granulations from its walls?—*Lancet*, Sept. 18.

An interesting case of abscess of the liver, opening into the lungs, which terminated fatally, is recorded in the *Lancet* (July 17th, 1847) by Dr. A. T. Thomson, with some judicious clinical remarks.

29. *Thymic Asthma*.—Dr. HÉRARD has made this disease the subject of an inaugural thesis. He observed numerous cases of it in the Children's Hospital, at Paris, and considers it to be the result of spasm of the glottis, or of the diaphragm, and conceives there are three forms of it, according as one or the other, or both these organs are the seat of convulsion. When the spasmodic attack is limited to the glottis, the respiration, he says, is simply arrested for a few seconds, and is restored without the production of the special cry produced by inspiration during convulsion of the diaphragm. In the second form, in which the diaphragm *alone* enters into spasmodic action, the attack is marked only by several successive and sonorous inspirations; the symptoms of asphyxia are not by any means so well marked as in the first variety which we have described, because the glottis does not participate in the convulsion. In the third form, both the glottis and diaphragm are simultaneously convulsed, respiration is first suspended, and one or more sonorous inspirations are heard, and, not being followed by expiration, asphyxia is soon imminent; these sonorous inspirations resemble the crowing of hooping-cough, and are produced by the same cause. Death may occur—1, during the attack from asphyxia; 2, it may result from cerebral congestion; or, 3, be the consequence of gradually increasing debility.

On dissection of the bodies of children who have died of this disorder, M. HÉRARD asserts, that no characteristic alteration can be detected. As to the hypertrophy of the thymus gland, Dr. HÉRARD refuses to admit that it has anything to do with the production of this form of asthma, and shows, from carefully drawn-up statistics, that the volume of the gland is in harmony with the state of health or weakness of the constitution, and not with the presence of asthma. It is not a little singular that anatomists should disagree on a point which would, at first sight, seem so easy to ascertain, as the question of the normal size of an organ; and it is not without surprise, that we find Meckel averaging its weight at twenty grammes, Burdach at twelve grammes, Haller at eight or ten, and Haugsted positively asserting, that in children of the same age, the gland may weigh from four to twenty grammes! Haugsted is much nearer to the truth, according to Dr. HÉRARD, who attributes the great size of the thymus entirely to the vigorous constitution of the child. The Germans place in the brain the cause of this malady, and refer it to an "arrêt de développement," marked by the incomplete ossification of the fontanelles, the enlargement of the liver, the patency of the foramen ovale of the heart, the late evolution of the teeth, and the hypertrophy of the thymus. Dr. HÉRARD cannot adopt this view, and observes, with much reason, that it is precisely in large, well-formed children that the thymus is found in a state of hypertrophy. Dr. Corrigan has considered inflammation of the cervical part of the spinal cord as a cause of spasma glottidis, and has published an interesting case in the *London Medical and Surgical Journal*. (1836), to illustrate this position. But this case, in which spinal irritation, at least, seems evidently to have produced the convulsive symptoms which now occupy our attention—this case has remained solitary; and, whilst it compels us to admit that it may occasionally bring on spasmodic contraction of the glottis, it leaves us at liberty to admit that it is far from being its only cause. The anatomical alteration which Dr. HÉRARD has met with constantly, viz., pulmonary emphysema, cannot by any means be looked upon as a cause, but as an effect of thymic asthma.—Dr. M. Carthy, in *Med. Times*, Nov. 6, 1847.

30. *Thymic Asthma*.—In the *Abeille Médicale*, we find recorded several cases of this disease which terminated fatally. The author, Dr. PÉRY, found on dissection